# 6. Data Collection with the NT

The NT categorizes most data according to whether it falls in the *Limited Data View*, or the *Detailed Data View*. In addition to recording information for existing records within these views, new records can also be created in the *Limited Data View*.

To access an existing data record or create a new one, you will need to first choose either the *Limited* or *Detailed Data View* option from the main screen. Once in this section, you will see that in addition to the data recording pages within the views, there are also functions that can be accessed via the top tool bar.

# 6.1 Top Tool Bar Functions

There are three buttons with drop down menus along the Top Tool Bar: File, View, and Help. Under each drop down, there are several functions and/or options.

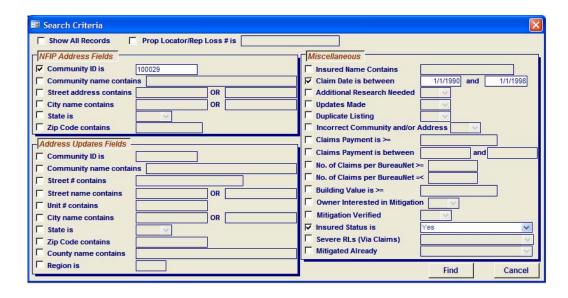


### 6.1.1 File

There are five functions available under the File menu: Find, New, Save, Delete, and Close.



Find - The Find function is used to retrieve an existing record or records that meet certain criteria. The Find function allows for a search of records by inserting the RL number as well as several other criteria. In the NFIP Address Fields section, information such as the NFIP CID, the community name, or parts of an address can be entered to perform a search. This search is performed on data from BureauNet that has been uploaded to the NT.



In the *Address Updates Fields* section, information entered by the NT user to update or correct address and community information can be queried.

Other criteria listed under *Miscellaneous* may be used to locate a property such as: approximate claim period, claim amount, number of claims payments<sup>3</sup>, building value, incorrect address, and whether or not a mitigation action has been utilized.

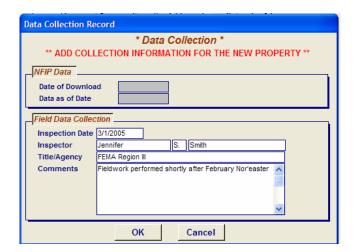
All the records matching the search criteria will be opened. The arrow keys on the bottom left of the screen may be used to move from one record to another. The Page Up and Page Down keys may be used to move to the previous and next records, respectively. The Home key can be used to access the first record, and the End key can be used to access the last record.

New – The New selection is used to create a new record. Generally, new records will be created within the *Limited Data View* for properties that are not RLs. Records for RL properties should be created through the *Import BureauNet Data* function. When the *New* key is selected, the *Data Collection Record* window will open. The user must complete the Inspection Date, Inspector, and Title/Agency fields in order to create the record. After this information is entered and OK is selected, the user will also be prompted to assign a Property Locator number to the record. For non-RL properties, the convention for this naming includes the six-digit CID followed by the street address not to exceed 50 characters total. For example, in the City of Hopkinsville, Kentucky, where the CID is 210055, the Property Locator number for 333 Main Street would be 210055 333 Main St. There should be no apostrophes or quotes used in the Property Locator Number. After assigning a Property Locator number and choosing *OK*, a new blank record

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<sup>&</sup>lt;sup>3</sup> This field will be set to "Unknown" if data is appended to NT v. 2.0 from an earlier version, or if a new record is added outside of the BureauNet import process. To populate the field, import the newest BureauNet download.

will be available. If a Property Locator number more than 50 characters is chosen, there will be an error message.





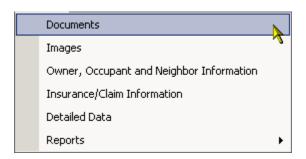
Save – Saving data is done with this key. Each time you enter a record, the first time data is saved for the property, the user will be prompted with the Data Collection Record window. If the Field Data has not yet been entered, it will need to be completed the first time a record is saved. The fields Date of Download and Data as of Date correspond to BureauNet data that have been imported and will be automatically populated during an import; they cannot be manually entered or edited. Users will be prompted to save records when entering data if they make changes, toggle between the Limited Data and Detailed Data Views, or move from one record to another. This will happen each time a record is opened and edited. Note: The data in the most recently modified box will not be saved unless you tab or click out of the box before saving. You must click out of the most recently modified data entry box before pressing save.

Delete – This function is used to delete individual records and must be used when the record is open. After choosing delete, a window will open where the user must confirm the deletion of the record.

Close – This will close the records and return the user to the Main Menu. If data have been edited, but not saved, choosing Close will prompt a window asking if the user wants to save changes.

### 6.1.2 View

There are six options under the drop down menu for View: Documents; Images; Owner, Occupant and Neighbor Information; Insurance/Claim Information; Limited/Detailed Data; and Reports.



Documents – The Documents feature provides an interface for loading and viewing documentation attached to individual records. Such documentation might include a copy of an Elevation Certificate, a FIRMette with the property location marked, or information about pending mitigation projects (project description,

cost estimate, etc.). To insert a document, click Load, browse to the desired file, and select it. To view an attached document, select it from the list and choose *View* as shown in the image below. Similarly, highlighting the file name and selecting *Delete* will delete documents.



Images – The Images feature provides an interface for loading and viewing images that may be stored with the record. To insert an image, click Load then



select the appropriate graphics file from the Locate Files window. A thumbnail of the image will be displayed in the Load Images window. The Load Images window displays up to six thumbnails at a time. Once a file has been loaded, it can be set as the main image or deleted by right clicking on it (by default, the main image will be the first image loaded). After closing out of the Load Images window, the main image will appear as a thumbnail in the upper right portion of the Limited Data View if the View thumbnail image box is checked. A full size image can be displayed by clicking on the thumbnail. The thumbnail image will be closed by selecting exit (the X in the upper

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right corner). It will reappear if you leave the record and return. The main image is also the image displayed on the basic report.

Owner, Occupant, and Neighbor Information – Fields in this window should be completed if there was communication with the owner, occupant, or a neighbor as part of the data collection efforts. Dates of contact as well as names and phone numbers should be entered. Additionally, if the owner was contacted, it should be indicated whether or not he or she expressed an interest in mitigating the structure.

Insurance/Claim Information – This feature provides information on the insurance policy and allows the user to enter additional information as well. The Insurance section indicates whether the structure is insured, whether it is insured as either pre- or post-FIRM, the current insured's name, the zone it's insured in, and the occupancy type. All of this insurance information comes from the BureauNet download. Additional fields where the NT user can enter information are unshaded and include the insurance company number, policy number, and the premium paid. The Claims section shows information from BureauNet and includes the name of the last claimant, the total number of claims per BureauNet, the date of the last claim, the estimated building value, and total payments made for the property (both building and contents). There is a note here that indicates that, for the Total number of claims per BureauNet, the NFIP Bureau and Statistical Agent has counted claims paid within 10 days of each other as one claim. Claims with identical dates are displayed as one claim with all payments

combined. Claims within 10 days of each other, but on separate dates, are displayed as separate claims (see Claims Tab) but only counted once under total number of claims per BureauNet.



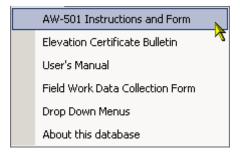
Limited/Detailed Data – This feature enables the user to toggle back and forth between the Limited and Detailed Data Views.

Reports – This feature allows the user to access the reports while in the Data Views. The same report options are available here as were described in Section 4.3 of this guide. In addition, here you also have the capability to run the reports just for the properties that have been selected through the Find feature.

# 6.1.3 Help

The *Help* drop down menu provides access to useful reference documents, including the following:

- AW-501 Instructions and Form,
- Elevation Certificate Bulletin,
- the User's Manual, and
- Field Work Data Collection Forms and corresponding Drop Down Menus



Additionally, the *About this database* feature identifies the version of the NT and the version of Microsoft Access that is running.

### 6.2 Limited Data View

Within the data collection portion of the NT, there are three page/tabs for data entry under the Limited Data View:

- 1. Address and Updates
- 2. Site Observations
- 3. Flood Risk and Mitigation Possibilities

## 6.2.1 Address and Updates Tab

#### 6.2.1.1 NFIP Address

The NFIP Address section is populated by importing information from the BureauNet Import and represents the address information currently associated with the property. If the address has been modified from an earlier listing, the previous address will also be imported and can be viewed by pressing the *Previous Address* button on the top right of the screen. All of the information imported from BureauNet is for reference only and cannot be edited, thus, these fields are "grayed out."

### 6.2.1.2 Address Updates

The address updates section allows the user to update data from the BureauNet Import as necessary to facilitate easier searches for records within the NT. Additionally, if there are cosmetic errors with the address from BureauNet, or if

the user determines that the RL record is currently assigned to the wrong community, the address information may be corrected here. If updated data are provided, the user must select the incorrect community and/or address box. There is also a Notes button that will open a window where the user can enter more information about the property location or directions to the property.

This is the first section for which a datasheet view icon is present indicating that the user can also see the data contained in this section for all of the currently selected records within a datasheet view. This allows users to change the same piece of information for multiple records at the same time or to compare data between different structures. Also, information from these views can be exported into MS Excel format for more detailed analysis.





## 6.2.1.3 Mitigation Updates

A datasheet view icon is available if data in this section needs to be viewed or edited for multiple records. Four mitigation categories are listed in the first column of this section. The two columns with the FEMA header located adjacent to the categories (unable to locate property, flood protection provided, no building on property, and historic building) will be populated from the BureauNet Data import;

the "grayed out" boxes represent BureauNet information that cannot be manipulated by the user once the BureauNet data have been uploaded. The user will complete the two columns with the Field header where appropriate based on field observations and the data collected.

The user must assess whether or not any of the four mitigation categories apply to the structure and if the corresponding FEMA data are accurate. Coordination with state or local officials may be necessary to obtain documentation required to support the findings. The boxes across the four "mitigated" categories correspond to the data in BureauNet that FEMA has on record for the structure. The four numbered boxes correspond to codes for different mitigation actions and mitigation funding sources. These mitigation action and funding source codes can also be found on the NFIP Repetitive Loss Update Worksheet (AW-501). A sample AW-501 form is provided in Appendix G. Boxes 1 and 2 list the mitigation actions and boxes 3 and 4 list the primary and secondary funding sources, respectively. Boxes 1 and 2 are lined up with the "mitigated" categories to which the action codes apply – flood protection provided and no building on property. Following is a description of how to complete this section.

- Unable to Locate If the FEMA box is checked, the NFIP data indicate this
  structure could not be located. If, during the field visit, the structure cannot be
  located, the user should check the corresponding field box. A note should be
  added to identify the steps taken to locate the property and identify the nature
  of the address deficiency.
- Flood Protection Provided If some sort of retrofitting measure has been completed to protect the property from flood damage, the box should be checked. If not, the box should remain unchecked.
  - If the box is checked, choose from action codes A through F from the pull down menu labeled Box 1, corresponding to the type of protection provided (elevation, floodproofing, stormwater management, flood control project).
  - Boxes 3 and 4 should be used to indicate the primary source of funding and the secondary source of any known additional funding, respectively.

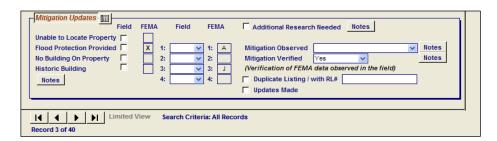
# • No Building on Property

- If the box is checked, choose from action codes G through I from the pull down menu labeled Box 2, detailing whether the building was acquired and/or demolished or relocated.
- Boxes 3 and 4 should be used to indicate the primary source of funding and the secondary source of any known additional funding, respectively.

Historic Building – If the FEMA box is checked, the structure has been determined to be a historic structure either listed on the National Register of Historic Properties or on a similar state register. If during the field visit it is determined that the structure is listed on the National Register or a State Register, the Field box should be checked. Structures eligible for the National Register or a State Register also qualify for special consideration by the NFIP. If a structure seems potentially eligible for inclusion on one of these registers, this should be noted in the Notes section.

Note: A Historic Building is not an equivalent designation to buildings that are within a Historic District. An individual historic property or structure derives its significance from being associated with important historical events, persons, or a distinctive architectural style, in comparison to a district, which derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or can be an arrangement of historically or functionally related properties. For example, a district can also encompass several interrelated activities, such as industrial, residential, or commercial buildings or could contain buildings, structures, sites, objects, or open spaces that do not contribute to its historic significance.

In the example below, according to NFIP records, the property has been mitigated via a flood protection measure. The A in Box 1 indicates that the structure was elevated to or above the BFE, and the J in Box 3 notes that the Hazard Mitigation Grant Program (HMGP) served as the primary funding source. As previously mentioned, these codes are defined in the drop downs under the field boxes and correspond to the codes found on the second page of the AW-501 form (Appendix G).

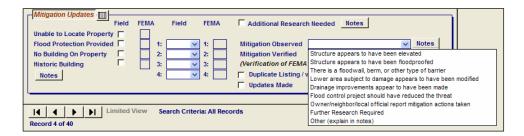


The *View/Documents* function on the NT bar may be used to load any supporting documentation available, such as elevation certificates or demolition permits, for claimed mitigation measures.

If a record needs to be tagged for additional research, the *Additional Research Needed* box should be checked. Notes pertaining to the items for further investigation can also be included.

Under the *Mitigation Observed* drop down menu, the user has the opportunity to populate the NT with apparent mitigation measures observed on-site that are not yet part of the NFIP record and that cannot be easily documented while only visiting the site. The measures included under the drop down box are as follows:

- Structure appears to have been elevated
- Structure appears to have been floodproofed
- There is a floodwall, berm, or other type of barrier
- Lower area subject to damage appears to have been modified
- Drainage improvements appear to have been made
- Flood control project should have reduced the threat
- Owner/neighbor/local official report mitigation actions taken
- Further Research Required
- Other (explain in notes)



The Mitigation Verified drop down box may be used to record whether or not the mitigation listed from the BureauNet download has been observed and verified in the field.

Under *Duplicate Listing with RL #*, the user should check the box if it is a duplicate listing and note the Repetitive Loss/Property Locator number of the other repetitive loss listing(s).

If changes or updates are recorded in the mitigation section (including checked mitigation type boxes, and mitigation codes or funding sources) or the property is a duplicate listing, the *Updates Made* box must be checked to indicate the potential need for updates within the BureauNet system.

#### 6.2.2 Site Observations Tab

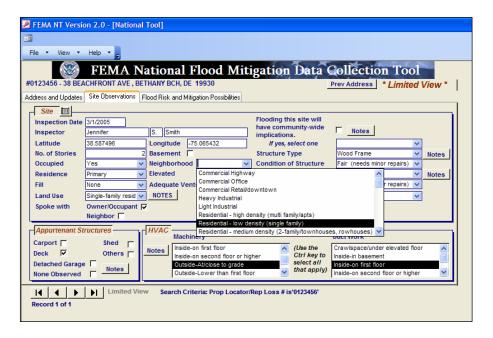
This screen contains several sections that should be completed during the field inspection. Note that a datasheet view is available for this section.

#### 6.2.2.1 Site

The following data should be entered in this section based on a site visit:

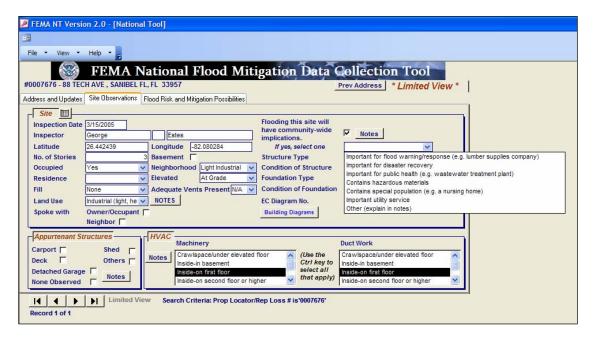
- Inspection Date
- Inspector (name)

- Latitude and Longitude coordinates These should be obtained in the field using GPS equipment such as a handheld GPS unit. Accuracy within 20 meters (approximately 65 feet) is required for FEMA grant applications. The accuracy of the GPS unit should be checked, and the reading taken at the corner of the structure with the lowest adjacent grade whenever possible. If the grade is uniform, the reading should be taken at the corner of the structure closest to the flood source.
- Number of Stories This may be determined from a field visit or from building records. A story is defined as a complete above grade section of a building having one continuous or approximately continuous floor. Generally, this does not include basements (sub-grade or partially sub-grade) or attics.
- Basement check box if there is a basement as defined by the NFIP. A
  basement is defined as any area of a building with a floor that is below ground
  level on all sides.
- Occupied The structure's occupancy status should be indicated using the following selections: yes, no, or seasonal.
- Residence If it is known, the user should indicate whether residential buildings are primary or secondary residences.
- *Fill* If there is fill, the height should be indicated. A drop down menu provides choices from below street grade to >4 feet.
- Land Use The structure's appropriate land use should be indicated from the
  following list of uses: single-family residential, 2 to 4 family residential, multifamily residential (5 or more units), commercial (highway, office, retail,
  downtown), industrial (light or heavy), institutional (hospitals, churches),
  educational (schools, colleges), non-profit, public, semi-public, transportation,
  open space, and other.
- Spoke with The boxes indicating whether the NT user spoke with the owner/occupant or neighbor should be checked if they apply. Upon checking one of these boxes, the Owner, Occupant, and Neighbor Information window will open where further details should be added including pertinent details about the communication.
- Neighborhood Information on the neighborhood surrounding the property should be provided by highlighting the appropriate selection from the following categories: commercial highway; commercial office; commercial retail/downtown; heavy industrial; light industrial; residential high density (multi-family/apartments); residential low density (single-family); residential medium density (2-family, townhouses, rowhouses); and rural residential.



- Elevated The structure's lowest floor elevation above grade, if applicable, should be indicated. A drop down menu provides selections ranging from Not Applicable to >12 feet.
- Adequate Vents Present The Yes, No, Not applicable, or Undetermined button that best indicates if vents are present that meet the community's floodplain management requirements should be selected. For post-FIRM structures with enclosures below the BFE, this means at least two openings having a net area at least 1 square inch for every square foot of enclosed space are situated on different walls of the enclosure, so that their bottom edges are no higher than 1 foot above grade. Additional minimum NFIP requirements for vents can be found in the Code of Federal Regulations [44 CFR §60.3 (c) (5)]. If the structure is pre-FIRM, not in a SFHA, or without enclosures below the BFE, select Not Applicable.
- Flooding this site will have community-wide implications A check in the box for this category indicates that the building has either an essential public function, contains a special population, or has hazardous material storage onsite. If this box is checked, then one of the following options should be selected from the drop down menu:
  - Important for flood warning/response
  - Important for disaster recovery (e.g., lumber supplies company)
  - Important for public health (e.g., wastewater treatment plant)
  - Contains hazardous materials
  - Contains special population (e.g., nursing home)

- Important utility service
- Other (explain in notes)



- Structure Type This is indicative of the major type of materials used to construct the structure and the degree of engineering involved in its design. General categories should be selected if further details are unknown (i.e., wood frame vs. engineered wood frame, or steel vs. heavy steel). Consultation with the local building official is highly recommended. The NT provides a selection of common structure types and includes a choice for Other and a notes section should the NT user encounter a construction type not listed.
- Condition of Structure These data are based on the level of repair required.
   Consultation with the local building official is highly recommended.
  - Good (Optional Minor Repair) Select this option when only cosmetic type repairs are needed
  - Fair (Needs Minor Repair) Select this option when the following characteristics are observed:
    - Minor shrinkage cracks due to thermal expansion and contraction
    - Signs of rust on iron or steel members
    - Signs of corrosion of rebar
  - Poor (Needs Significant Repair) Select this option when the following types of damage are observed:
    - Bowed brick veneer wall or parapet walls
    - Leaning of wall

- Cracking of wall due to excessive settlement
- Building settlement
- Large cracking around sills, eaves, chimneys, parapets, and iron or steel lintels
- Differential settlement of chimney
- Fungal and insect attack of wood
- Exposed rebar in concrete walls due to corrosion
- Fire damage
- Foundation Type The selection of a foundation type may require a close inspection of the structure. Consultation with the local building official is highly recommended. The NT provides a selection of common foundation types and includes a choice for *Other* and a notes section should the NT user encounter a foundation type not listed.
- Condition of Foundation This is based on the level of repairs needed.
   Consultation with the local building official is highly recommended.
  - Good (Optional Minor Repair) Select this option when only cosmetic type repairs are needed
  - Fair (Needs Minor Repair) Select this option when one or more of the following is observed:
    - Minor shrinkage cracks in foundation pier
    - Soil shrinkage due to nearby trees or plants
    - Cracks associated with thermal expansion and contraction
  - Poor (Needs Significant Repair) A foundation is considered to be in poor condition if one or more of the following conditions exist:
    - Movement of foundation
    - Soil erosion around foundation
    - Settlement or rotation of pier footing
    - Cracking in foundation wall due to movement
    - Deterioration of pier like vertical cracking or bulging.
    - Fire damage
- EC Diagram No. This refers to the type of structure and foundation as it corresponds to one of eight diagrams included as part of the FEMA Elevation Certificate (EC) (FEMA Form 81-31) on pages 6 through 7 of the EC Instructions. The diagrams from the FEMA EC are attached to the NT for reference. Simply select the button labeled Building Diagrams below this

selection to see representations of each type of building and then select one of the eight options, or choose Unable to Determine.

## 6.2.2.2 Appurtenant Structures

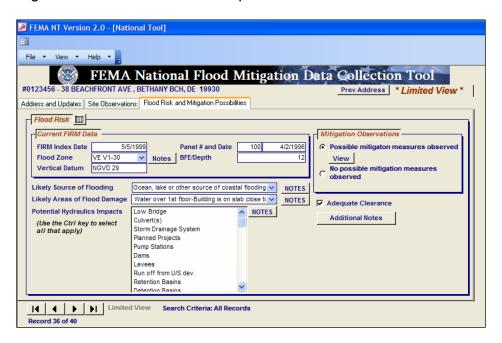
Appropriate boxes should be checked for appurtenant/accessory structures located on site such as a detached garage, carport, deck, shed, etc. Any additional comments may be provided in the *Notes* section.

#### 6.2.2.3 HVAC

Information about the location of the Heating, Ventilation, and Air Conditioning (HVAC) is collected in this section. All locations of HVAC machinery and ductwork should be identified (crawlspace, inside, or outside) and highlighted. Others that are not included in the list may be explained in the corresponding *Notes* section.

## 6.2.3 Flood Risk and Mitigation Possibilities Tab

This section includes information such as current FIRM data, flooding sources, likely areas of flood damage, potential hydraulic impacts, and mitigation observations. The information for this tab is found through study of the FIRMs, and through an assessment of the site performed in the field.



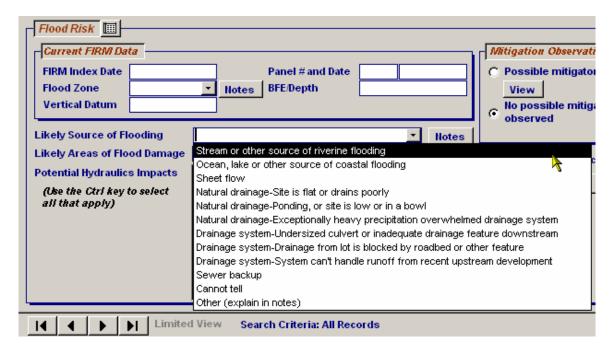
#### 6.2.3.1 Flood Risk/Current FIRM Data

A datasheet view is available for this section, which contains information that is obtained from the FIRM, such as the FIRM Index Date, Flood Zone (AE A1-30, A, AR, AO, V, VE, B/XShaded, C/XUnshaded) Vertical Datum, FIRM Panel # and Date, and BFE or Flood Depth (AO and AH zones). The NFIP Community Status Book (available online at <a href="http://www.FEMA.gov/fema/csb.shtm">http://www.FEMA.gov/fema/csb.shtm</a>) can be used to

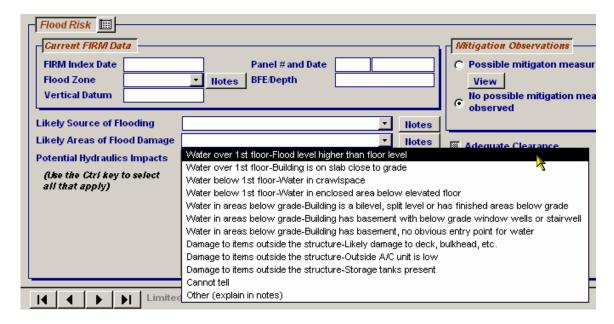
identify the date of the current FIRM Index to be used when locating the structure on its appropriate FIRM panel. It is the date listed under the Current Effective Map column.

A vertical datum type should be entered for the BFE. It will generally be NGVD 29 (National Geodetic Vertical Datum of 1929) or NAVD 88 (North American Vertical Datum of 1988). In some instances, a locally applicable vertical datum may be used. If the BFE and building elevation are provided in different vertical datum, it will be necessary to obtain the conversion information (probably from a local source) and enter the conversion formula in the notes section. Information on the FIRM Index Date, Flood Zone, BFE or Depth, Vertical Datum, Panel number, and Panel Date is obtained from the FIRM.

Likely Source of Flooding should be determined during the field visit with assistance from the FIRM or other map as necessary. The appropriate source from the dropdown (riverine flooding, coastal flooding, sheet flow, natural drainage, drainage system, sewer backup, etc.) should be selected.



Likely Areas of Flood Damage – An option from the dropdown should be selected to identify the likely areas of flood damage (water over or below first floor, water in areas below grade, damage to items outside the structure, etc.). This information may be obtained from a site visit and/or talking with the homeowner or neighbor.



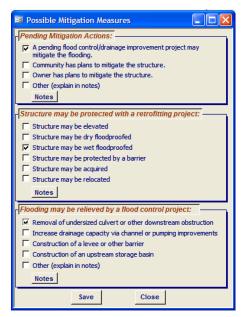
Potential Hydraulics Impacts – This section provides a list of potential structures and infrastructure that might affect the frequency and/or severity of flooding in the area. Multiple items may be selected by pressing the control key. A wide range of projects includes bridges, levees, storm drain systems, pump stations, dams, retention basins, detention basins, etc. For the planned projects and other selections, a notes box is provided for impacts that are not listed to be described.

### 6.2.3.2 Mitigation Observations

This section allows users to input information regarding pending mitigation projects. It also provides the NT user an opportunity to analyze the results of the

data collected and provide any comments on possible appropriate mitigation actions. The NT user is expected to use his/her knowledge and experience to assess the situation and suggest feasible measures that might be cost-effective. The *View* button enables the user to access the list of Possible Mitigation Measures. Notes tabs under each of the three subsections of Possible Mitigation Measures are included for the input of additional information.

Adequate Clearance – This box should be checked if the structure is clear by at least 20 feet on each side to allow for equipment and construction on site. This clearance may be necessary during construction of mitigation projects such as structure elevation.



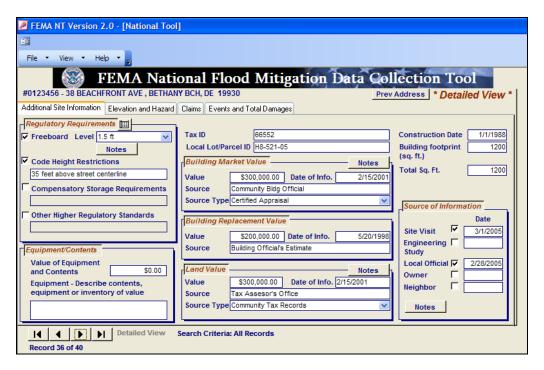
## 6.3 Detailed Data View

The Detailed Data View is applicable and suitable when a more thorough inspection of the property and its surroundings is conducted, and when contact with local or state officials is made to gather structure-specific information and coordinate on-site data collection efforts. There are four pages/tabs within the Detailed Data View: Additional Site Information, Elevation and Hazard, Claims, and Events and Total Damages.

#### 6.3.1 Additional Site Information Tab

Tax Identification Numbers and Local Lot/Parcel Identification Numbers may be added in the top center of the screen. This information is useful in identifying a property when the address is unclear or inadequate. Note that a datasheet view icon is also available for this page if the user wishes to view or edit these data for multiple records.

The Top right of this screen provides an area for the entry of *Date of Construction* — This information might be found in building permit records. Normally, the date the permit was applied for will be used. If the year is known, but not the exact date, it can be entered using 01/01 for the month and day. Fields for the building footprint square footage and the total structure square footage are also provided. While this information can be gauged during a site visit, the best source for accurate measurements is the local building or zoning department.



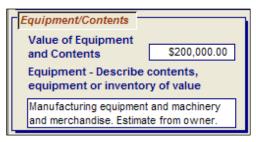
# 6.3.1.1 Regulatory Requirements

A datasheet view is available in this section that includes important criteria that could affect potential mitigation measures. Information on these regulatory requirements should be collected from local officials. They include the following:

- Freeboard If the community requires structures in floodprone areas to be
  elevated a specific height above the BFE, the Freeboard button should be
  checked. The required height above the BFE should be selected in the
  Level box.
- Code Height Restrictions This indicates the maximum elevation/height to which a structure can be constructed or elevated, and is usually implemented in waterfront communities to protect views.
- Compensatory Storage Requirements Some communities have regulations requiring a hydraulically equivalent storage volume to be created for floodwaters when development results in the displacement of floodwater storage capacity from part of the floodplain. If this is applicable, it should be recorded.
- Other Higher Regulatory Standards Any other state or local regulations that could affect mitigation measures such as enclosure limitations or special requirements for the protection of critical facilities should be recorded in this section.

# 6.3.1.2 Equipment/Contents

Only the total value of noteworthy or unusual equipment and contents should be entered in this section. This will generally apply only to non-residential uses. A description of unusual or expensive items (e.g., machinery, merchandise) should be provided, along with any other information that is relevant. The



values of contents or machinery common to the current or anticipated occupancy do not need to be entered.

# 6.3.1.3 Building Market Value

This is the value of a structure based on the estimated price for which a willing buyer in the current real estate market would pay to a willing seller. This information may be available from a tax assessor's office or from local building officials. While tax assessment records do not always give an actual building market value, they may note a multiplier to be used with the assessment value in order to arrive at a market value. If a tax assessment is available without some type of conversion multiplier, but seems undervalued for a market value, this should be noted by clicking on the *Notes* button. The following data should be entered in this section:

- Dollar value
- Date the value was estimated
- Source (e.g., local building official, tax assessor's office)
- Source type (e.g., community tax records, certified appraisal)

### 6.3.1.4 Building Replacement Value

Building Replacement Value – This refers to the value of a structure based on the cost of materials and labor to rebuild it. Building replacement values may be available from local officials and are required for Benefit-Cost Analyses. If necessary, it may be determined by a building official, engineer, or architect using cost estimating tools such as the Marshall and Swift Handbook, R.S. Means Cost Data, or other comparable resources. Information to be completed for this section includes the following:

- Dollar value
- Date the value was calculated
- Source of the value, including who created the estimate and the method of calculation used to develop the estimate.

### 6.3.1.5 Land Value

As with the Building Market value, the Land Value of the property may be available from tax assessment records, and should be recorded separate from the building value. If this assessment seems undervalued (or overvalued), the user should enter a message using the *Notes* button, indicating a possible discrepancy. Information to be completed for this section includes the following:

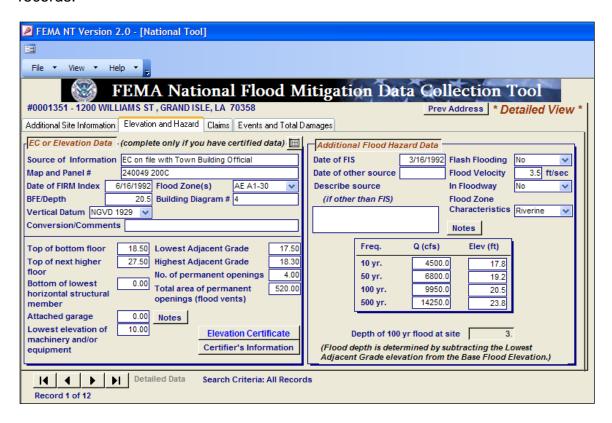
- Dollar value
- Date the value was estimated
- Source of the value
- Source type of the value such as tax assessment or appraisal

### 6.3.1.6 Source of Information

This feature enables the user to report the various source(s) of information recorded under the detailed view. A date should be included for each source that is checked. The *Notes* section may be used to provide names, phone numbers or addresses of contacts.

#### 6.3.2 Elevation and Hazard Tab

This screen contains data related to the flood hazard and various elevation reference points of the structure that may be on file with the community. The left half of the screen requires information about the BFE and elevation of the structure. The right half of the screen requires additional flood hazard information from the FIS or other comparable source. Note that a datasheet view icon is also available for this page if the user wishes to view or edit these data for multiple records.



#### 6.3.2.1 EC or Elevation Data

This section should capture information directly from a FEMA Elevation Certificate (EC), if available. The FIRM information gathered here may be different than the current FIRM data gathered in Section 6.2.3.1 if community FIRM panels were revised after the structure was permitted for construction. If an EC is not available, certain fields may be completed using as-built records or similar certified data. Any discrepancies noted in the BFE, FIRM Zone, FIRM Index date, Panel number, etc. (as compared to data collected for the *Limited View/Flood Risk and Mitigation Possibilities*) should be noted in the notes area provided for this section. Following is a description of each requested data field.

 Source of Information – If an EC is not provided, the source of information might be a building permit application or an as-built certification. An engineer working for the property owner or developer, or the local building code official or zoning officer may have determined and gathered certified elevation information. Generally, the flood elevation data will have been taken from the community FIS or FIRM where the BFE for a given site is mapped. However, when the area is mapped as an Approximate A or V zone, a local study or historical high water marks might be used to establish the BFE. Additionally, if a regional or local study completed more recently than the effective FIS indicates an increase in the BFE, this study might be used as a source for flood hazard data.

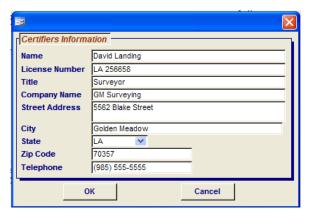
- Map and Panel Number The FIRM map and panel number should be entered here if it was recorded on the certified data.
- Date of FIRM Index This should be taken from the EC or other certified data where available.
- Flood Zone The flood zone from the EC or other certified data (corresponding to FIRM zones AE, VE, B/X shaded, C/X unshaded, AO, AR, etc.) should be noted here.
- BFE/Depth The BFE or flood depth (AO, AH zones) from the certified data should be entered here.
- Building Diagram Number This is the EC Building Diagram Number reported on the elevation certificate. The linked FEMA Elevation Certificate can be viewed for reference by clicking on the *Elevation* Certificate button.
- Vertical Datum Enter the vertical datum type for the BFE from the EC or other certified data (see Section 6.2.3.1 for a description of vertical datum types and possible conversion notations).
- Conversion Comments If the BFE datum is different from the structure elevation information datum, a method for conversion should be entered here.

The next set of entries corresponds to those found in Section C of the FEMA EC. Structure elevation data and data about flood vents are entered here. The FEMA EC may be referred to for any questions. Again, this information should only be included if there is a certified source, such as an EC, on file with the community:

- Top of bottom floor This includes basements and other possible enclosures.
- Top of next higher floor
- Bottom of lowest horizontal structural member This measurement is generally only taken in V zones, but may also be relevant in communities with Coastal A zone regulations.
- Attached garage
- Lowest elevation of machinery and/or equipment
- Lowest Adjacent Grade

- Highest Adjacent Grade
- Number of permanent openings This includes the openings that serve as flood vents to allow the automatic entry and exit of floodwaters from areas below the BFE.
- Total area of permanent openings (flood vents) The surface area of flood vent openings in square inches.

Certifiers Information – The certifier's contact information, license number, company name and street address should be recorded in this section.



#### 6.3.2.2 Additional Flood Hazard Data

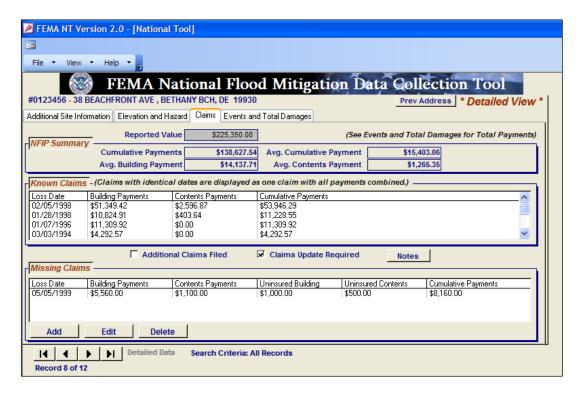
Information from the FIS or a comparable source (where the FIS is not available or better information is available) is collected here to characterize the flood risk and to collect flood hazard risk information that is necessary to run a Benefit-Cost Analysis.

- Date of FIS
- Date of Other Source
- Describe Source (if other than FIS) The name of the study or other source used should be provided here (e.g., USACE flood information reports, FHA floodplain studies, etc.). Adequate documentation of this source is necessary, including an electronic copy if available, or scanned images of pertinent parts of studies. These can be attached to the NT using the documents button to attach them (see Section 6.1.2 for how to load documents to the NT).
- Flash Flooding Information on whether or not the structure is subject to flash flooding may be obtained from the FIS or community officials' knowledge of the area.
- Flood Velocity Mean flood velocity within the floodway can be obtained from the FIS. For flood velocities at sites outside of the floodway, historical flood data might provide more accurate velocity estimations.
- In Floodway If a floodway analysis was performed as part of the FIS, the floodway delineation on the FIRM or Floodway Map will indicate whether the site is located within or outside of the floodway.

- Flood Zone Characteristics In this section, the type and characteristics of the flood zone should be included (riverine, coastal, sheet flow, shallow floods, ponding, ice jams, sewer backflows, etc.).
- Flood Frequency Based Discharges (Q) and Elevations Table Discharge information is available for certain points along a detailed studied stream and is found in the Summary of Discharges table in the Hydrologic Analyses section of the FIS. The elevations are usually available for detailed studied flood areas from the flood profiles and are necessary to run the Benefit-Cost Full Data Software.
- Depth of 100 year flood at site This depth will be calculated automatically if information on the BFE and Lowest Adjacent Grade is entered in the EC or Elevation Data section of this screen.

## 6.3.3 Claims Tab

Claims information from the BureauNet download is recorded in this section.



Reported Value – This is the reported value of the building associated with the most recent loss as recorded in BureauNet. It is determined by taking the replacement cost value (RCV) when available or, alternately, the actual cash value (ACV). RCVs were not reported prior to May 1, 1997. If the reported value from the most recent date of loss is not acceptable, the value from the previous date of loss is examined and used if deemed acceptable. Acceptable is defined as any value that is greater than zero, but less than \$10 million for 1 to 4 family properties and greater than zero but less than \$100 million for other properties. If

multiple occurrences of flooding are found for any date of loss, the "ASSUMED CONDO" label is used in the property value field. If no value meeting the definition of acceptable is found, the "VALUE NOT AVAILABLE" label is inserted in the property value field.

## **6.3.3.1 NFIP Summary**

Cumulative Payment – This refers to the total of all payments from claims as noted in the last column of the Known Claims table.

Average Cumulative Payment – This refers to the average payment per claim, including both contents and building. The entry is calculated from claims in the Building Payments and Contents Payments columns of the *Known Claims* table.

Average Building Payment – This refers to the average payment per claim for building payments only. It does not include the contents value.

Average Contents Payment – This refers to the average payment per claim for contents payments only. It does not include the building value.

#### 6.3.3.2 Known Claims

The *Known Claims* table is imported from BureauNet and contains information for each claim made on the structure, up to a maximum of nine claims. It includes information on the loss date, building payments, and contents payments.

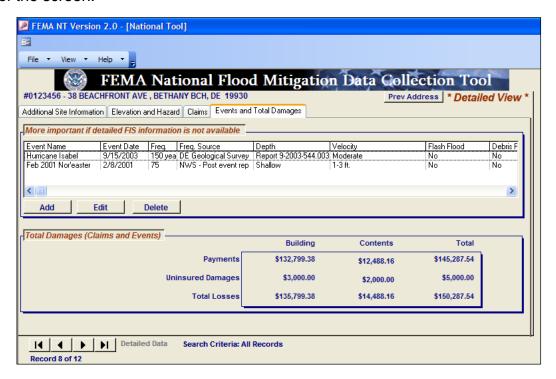
Additional Claims Filed – This box should be checked when there is an indication from the owner or other source (such as a local official) that a claim was made on the structure that was erroneously excluded from the NFIP data.

Claims Update Required – This box should be checked when there are data to support a missing claim and the user can provide adequate data for the claim to be further investigated and/or added to the NFIP data.

## 6.3.3.3 Missing Claims

The information in the *Missing Claims* table is similar to that in the *Known Claims* section, except that it allows the user to enter missing records. When information is provided or obtained that indicates that a claim was made, but not properly recorded with the corresponding structure (it may have been recorded with another structure) in the NFIP records, the claim information may be recorded in this table. This information may be obtained from copies of checks, adjusters' statements, proof of loss records gathered from property owners or local officials, or documented claims or records within the NFIP BureauNet data. Additionally, uninsured losses for building and contents corresponding to known claims (such as deductibles or damages exceeding the limits of the policy) may be added by the NT user to this section. The source of the data should be noted in the Notes field on the screen and any documentation (digital files) should be added via the documents attachment function (see Section 6.1.2). Records in the Missing

Claims Section can be added, edited, or deleted using the keys on the bottom left of the screen.



# 6.3.4 Events and Total Damages Tab

This tab allows the user to add information about reported damages to the structure where there are no insurance claim records, and also summarizes all of the losses for the structure including known claims, missing claims and other events.

#### 6.3.4.1 Events Table

The *Events* table enables the user to enter information about specific flood events, including their recurrence interval and flood depth. These events may or may not correspond to claims made that were recorded on the previous screen. If there are losses associated with the event that were not insured, the loss information should also be included in this table and explained. Records can be added, edited, or deleted using the keys on the bottom left of the table. In order to add an event, the following information should be provided:

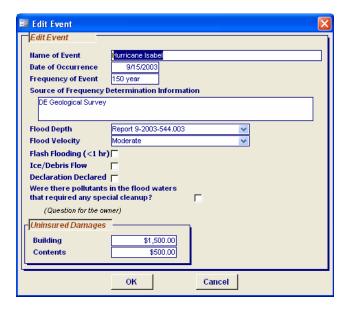
- Name of the Event (i.e., Hurricane Floyd or February 1991 snowmelt and rainfall event)
- Date of Occurrence
- Frequency of the Event (i.e., 25-year flood or 100-year flood)
   Note: FEMA's Mitigation Benefit-Cost Analysis (BCA) Toolkit CD provides guidance on acceptable methodologies for determining flood recurrence intervals.

- Source of Frequency Determination Information Clear documentation of the sources used for determining the recurrence interval/frequency of the event as well as any losses should be provided. The following are considered acceptable sources for flood event frequency determination: FEMA Flood Insurance Studies, US Geological Survey (USGS) Post-Event Reports, USACE Post-Event Report, and National Weather Service (NWS) or National Oceanic and Atmospheric Administration (NOAA) recurrence interval estimates. Estimates vary from location to location, so accurate documentation is necessary.
- Flood Depth
  - o very shallow (<1 ft)</p>
  - o shallow (1 to 3 ft)
  - o moderate (3 to 6 ft)
  - o deep (>6 ft)
- Flood Velocity
  - o fast (>5 ft/s)
  - slow/moderate (<5 ft/s)</li>

The appropriate boxes should be checked if the following has occurred:

- Flash Flooding
- Ice/Debris Flow
- Declaration Declared
- Were there pollutants in the flood waters that required any special cleanup?

Finally, the monetary amount of any flood damages reported by the owner that were caused by flooding events where a NFIP policy was either not in effect or where the damages incurred did not exceed the deductible or \$1,000 paid under the NFIP should be reported here.



# 6.3.4.2 Total Damages

The *Total Damages* table contains information on all damages entered on the *Claims* and *Events and Total Damages* screens and presents it in the form of a concise summary. The table contains information on Total Payments (both building and contents), Total Uninsured Damages, and Total Losses. Any edits made to the *Missing Claims* table or *Events and Total Losses* table will be reflected in the *Total Damages*.

